

# MONTHLY WEATHER REVIEW.

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The MONTHLY WEATHER REVIEW summarizes the current manuscript data received from about 3,500 land stations in the United States and about 1,250 ocean vessels; it also gives the general results of the study of daily weather maps based on telegrams or cablegrams from about 200 North American and 40 European, Asiatic, and oceanic stations.

The hearty interest shown by all observers and correspondents is gratefully recognized.

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As far as practicable the time of the seventy-fifth meridian is used in the text of the MONTHLY WEATHER REVIEW.

Barometric pressures, both at land stations and on ocean vessels, whether station pressures or sea-level pressures, are reduced, or assumed to be reduced, to standard gravity, as well as corrected for all instrumental peculiarities, so that they express pressure in the standard international system of measures, namely, by the height of an equivalent column of mercury at 32° Fahrenheit, under the standard force, i. e., apparent gravity at sea level and latitude 45°.

## FORECASTS AND WARNINGS.

By Prof. E. B. GARRIOTT, in charge of Forecast Division.

The month opened with abnormally high barometric pressure over the British Isles and Iceland. The barometer was also above the normal over the Hawaiian Islands and northern portions of the United States. Attending this unusual distribution of atmospheric pressure, temperature was below the seasonal average generally over the interior of the United States and was above normal in the Plateau and Pacific States and on the Atlantic coast.

The first well-defined disturbance traversed the country from the 1st to 7th, preceded by temperature rising above the seasonal average, attended by local rains, and followed by a brief period of fair weather and moderate temperature. The following special forecasts regarding this warm period were issued:

### THURSDAY, July 2, 1908.

The warm wave that now covers the extreme Western States will advance over the Plains States by Saturday, overspread the central valleys Sunday and Monday, and set in over the Atlantic States Monday and Tuesday.

### SUNDAY, July 5, 1908.

A barometric depression that extends from Minnesota to Texas will drift slowly eastward during the next three days and cross the Atlantic seaboard about the middle of the week, preceded by warm, fair weather, attended by local rains, and followed by cooler, fair weather. The cooler area will reach the upper Mississippi Valley and the western Lake region Monday, will cover the Ohio Valley and eastern Lake region Tuesday, and reach the Atlantic coast Tuesday night or Wednesday.

The depression crossed the Atlantic seaboard Wednesday, attended by local rains, and the cooler area advanced as indicated, overspreading the Atlantic coast States during Tuesday night and Wednesday. The passage of the depression was followed in the several districts by three days of cooler, fair weather.

On Thursday, July 9, the following special forecast was issued:

### THURSDAY, July 9, 1908.

A warm wave that will cover the Plains States Friday will extend over the central valleys Saturday and set in over the Atlantic States Sunday. The warm period will be of two to three days duration in the several sections, and will end with rains in the Plains States on Sunday, in the

Mississippi Valley and western Lake region Monday, and in the Ohio Valley, the eastern Lake region, and the Atlantic States Monday or Tuesday. The rains referred to promise to be sufficiently heavy to end the existing serious drought in the Ohio Valley and Middle Atlantic States.

The warm wave was the most intense of the present summer. Its progress and duration, and the movement of the rain and cooler area conformed to the forecast. In the Middle Atlantic States the warm wave set in Sunday and continued until Tuesday when it was broken by rains that were heavy in areas from the Ohio Valley over the Middle Atlantic and southern New England States.

On Wednesday, July 15, the following special forecast was issued:

### WEDNESDAY, July 15, 1908.

A barometric depression that now covers the Rocky Mountain districts will move over the Plains States Thursday, cross the central valleys and Lake region Friday and Saturday, and reach the Atlantic States Saturday night or Sunday, preceded by rising temperature, attended by local rains and thunderstorms, and followed by two or three days of fair and cooler weather. This depression will cause rains in the wheat and corn belt and also rather copious rains in the Ohio Valley and the Middle Atlantic and New England States.

The depression advanced as forecast and generous rains fell in the corn and wheat region. Rainfalls were also heavy in areas in the Ohio Valley and in the Atlantic States north of Maryland and relieved the drought that prevailed in those sections. The depression was followed, in the interior of the country, by two or three days of temperature below the seasonal average. In the Middle Atlantic States the fall in temperature was slight.

The following forecast was issued on July 21:

### TUESDAY, July 21, 1908.

Showers will set in over the Rocky Mountain regions Wednesday, and the rain area will advance over the Plains States Thursday, the central valleys Friday and Saturday, and reach the Atlantic States Sunday or Monday. Preceding the rain area temperature will rise in the several districts, and following its passage will come a period of cooler weather that will cross the country the latter half of the week and reach the Atlantic coast about the beginning of next week.